### 5.3.2 Alignment E (Consisting of Western Segments 1 and 4)

### Western Segment 1

Route (south to north): Begin at the intersection of Kansas Avenue, North Dakota Avenue, and Blair Road. Travel northwest on North Dakota Avenue to the intersection with 3<sup>rd</sup> Street. Travel north on 3<sup>rd</sup> Street to Whittier Street (Photo 16). Turn left on Whittier Street to the intersection with 4<sup>th</sup> Street. Turn right on 4<sup>th</sup> Street to the intersection with Blair Road and Cedar Street (Photos 17 and 18). All of this trail segment would be on-street except for one block of sidepath between Butternut and Blair Rd.

#### Western Segment 1 Criteria and Descriptions

		North Dakota Ave. to 3 <sup>rd</sup> St. to Whittier to 4 <sup>th</sup> St. to Blair/4 <sup>th</sup> /Cedar		
Brief Description		intersection.		
		Used in Alignment E.		
Continuity	0	<b>POOR.</b> Seven (7) intersection crossings.		
Elevation Change	0	<b>AVERAGE.</b> Gradual hill on North Dakota Ave. from Kansas Ave to 3rd St.		
Trail Access	•	<b>GOOD.</b> Provides access to residential areas as well as 4th Street and Cedar Street retail and commercial areas.		
Metro Access	0	AVERAGE. Metro Station is near northern point of segment.		
Trail Safety	0	<b>AVERAGE.</b> All streets are large enough to safely accommodate dedicated bike lanes and a sidepath along the 4 <sup>th</sup> St. business district.		
Personal Security	•	<b>GOOD.</b> 3rd St., Whittier St., and 4th St. are well lit. 3rd St. and 4th St. are well traveled with adequate police presence.		
Economic Development	•	<b>GOOD.</b> Provides direct access to 4th Street and Cedar Street retail and commercial areas.		
Aesthetics of Trail	0	<b>AVERAGE.</b> 4th St. is an attractive streetscape with well-maintained homes and properties. 4th St. retail corridor is historic attribute to area.		
Neighborhood Impact	•	<b>LOW.</b> Trail traffic would not result in appreciable impact to surrounding neighborhoods.		
Environmental Impacts	•	<b>LOW.</b> Trail is on-street bicycle lanes through wide residential streets and a sidepath along 4 <sup>th</sup> St. business district.		
Construction Costs	•	LOW. Requires painting dedicated bike lane along segment and constructing the sidepath.		
Land Acquisition	•	LOW. No property acquisition required.		

Low ● Good Moderate ● Average High ● Poor



Photo 16. View north along 3<sup>rd</sup> Street between Van Buren Street and Whittier Street. Bicyclists would use proposed bike lanes, while pedestrians would use sidewalk in Segment 1 (Alignment E).



Photo 17. View south along 4<sup>th</sup> Street towards Whittier Street. Retail businesses exist along both sides of 4<sup>th</sup> Street. A sidepath would be constructed along the left (east) side of the street in Segment 1 (Alignment E).

### Western Segment 4

Route (south to north): Cross the intersection of 4<sup>th</sup> Street, Blair Road, and Cedar Street at crosswalk (Photo 18) (Figure 8). The trail travels between the Cedar Crossing development and the rail line northbound on WMATA-owned land. Currently, the Cedar Crossing development is a vacant fenced lot that is slated for development as high-density housing (approximately 50 units) (Photo 19). An agreement has been established with the developer to accommodate the trail. Travel northwest on Spring Place (Photo 20) to the intersection with Chestnut Street. Turn right on Chestnut Street to the WMATA-owned hillside adjacent to Piney Branch Road. Two options are proposed to cross Piney Branch Road to access the remainder of the trail: Option 1 involves construction of a series of switchbacks along the hillside to meet the sidewalk on the south side of Piney Branch Road (Photo 14). Travel east on Piney Branch Road and cross at the crosswalk. Option 2 would construct a bridge at-grade with the west side of the rail line to cross Piney Branch Road. A ramp system with a 180-degree turn would provide access to the sidewalk (Option 2 is incorporated in the cost estimates). Continue east on the sidewalk along Piney Branch Road and turn left at the Eastern Avenue intersection. Portions of the trail along Spring Place and Chestnut Street are on-street.



Photo 18. View south of intersection of 4<sup>th</sup> Street, Blair Road, and Cedar Street. Trail users would navigate this intersection from the foreground to the background.

High O Poor

## "Star Intersection" of Blair Road, 4th Street, and Cedar Street

The intersection of 4<sup>th</sup> Street, Blair Road, and Cedar Street is a confusing and dangerous intersection for pedestrians and bicyclists. A DDOT transportation study is currently underway to evaluate this intersection as well as the entire Takoma area. Changes to existing signalization and other modifications could improve the intersection for use in the trail. However, signal changes could increase delays for motorists. Figure 8 illustrates this intersection and potential trail alignments.

In the DDOT transportation study, preliminary traffic analysis gave this intersection a level of service (LOS) grade of F in the morning and an F in the evening (see Appendix D for more information). As for the estimated number of trail users, based on similar trails, DDOT expects an average of more than 100 users per hour with 200 or more during peak times. The Takoma Transportation Study is examining this issue more closely.

#### **Western Segment 4 Criteria and Descriptions**

Low Good

Brief Description		Cross the Cedar/Blair/4 <sup>th</sup> St. intersection at crosswalks and cross next to the Cedar Crossing development on a trail to Spring Place. Turn right onto Chestnut and cross Piney Branch on a bridge or use switchbacks to access Piney Branch Road.	
		Used in Alignment E.	
Continuity	0	<b>POOR.</b> Two (2) difficult intersection crossings.	
Elevation Change		GOOD. Flat until the steep hill at Piney Branch Road.	
Trail Access	•	<b>AVERAGE.</b> Provides frequent and convenient access points to residential property along Chestnut St., portions of Spring Place, and Piney Branch. South end of segment provides access to retail/commercial areas on Cedar St. and 4 <sup>th</sup> St.	
Metro Access	0	<b>AVERAGE.</b> South end of segment provides close access to Metro Station and bus stops.	
Trail Safety	0	<b>POOR.</b> Requires crossing Cedar St./Blair Rd./4th St. intersection. May require users to cross Piney Branch Rd. at Eastern Ave. crosswalk (Option 1).	
Personal Security	0	<b>AVERAGE.</b> Spring Place and Chestnut St. are not high activity areas, particularly after regular business hours. Trail is on-street providing more points to exit trail.	
Economic Development	0	<b>AVERAGE.</b> South end of segment provides direct access to Cedar St. and 4th St. retail and commercial districts.	
Aesthetics of Trail	•	<b>AVERAGE.</b> On-street route will not affect the mix of commercial and industrial uses with no landscaping or sidewalk. Aesthetics for trail users will be poor (see Photo 20).	
Neighborhood Impact	•	<b>LOW.</b> Trail traffic will add more visibility to underused areas of Chestnut St. and Spring Pl.	
Environmental Impacts	•	LOW. Trail is on-street bicycle route through residential streets.	
Construction Costs	0	<b>HIGH.</b> Bridge crossing Piney Branch Rd. or switchbacks down the hill on WMATA property at Piney Branch Rd.	
Land Acquisition	0	<b>MODERATE.</b> Requires acquisition of easements or purchase of WMATA land along rail line at Piney Branch.	

Moderate • Average



Photo 19. South view of Cedar Crossing development. Trail would access this property traveling north at the intersection of 4<sup>th</sup> Street, Blair Road, and Cedar Street.



Photo 20. View south on Spring Place. This corridor is dominated by industrial uses on both sides of the street.

### Alignment E Cost Estimate

Trail Element	Length (feet)	Type of Trail	Cost
North Dakota Avenue	2,065	Bike lanes	\$2,515
3 <sup>rd</sup> Street	1,874	Bike lanes	Completed
Whittier Street	539	Bike lanes	\$839
4 <sup>th</sup> Street	1,307	Bike lanes	\$2,207
Cedar Street to Spring Place	313	Asphalt trail	\$5321
Spring Place	517	Shared Roadway	n/a
Chestnut Street	446	Shared Roadway	n/a
Piney Branch Rd (Option 2)	100	Structure/Bridge	\$220,000
Ramp down to Piney Branch	200	Structure/Bridge	\$440,000
(Option 2)	200	Structure Bridge	ψττο,σου
TOTALS:	7,161		\$670,882

# **SELECT TO VIEW:**

Figure 7 Western Alignment E Map

# **SELECT TO VIEW:**

Figure 8 Star Intersection Map